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09/28/1999

THOMAS M. KEELEY

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7590 12/23/2008  
JOHN J HORN  
ALLEN BRADLEY COMPANY INC  
PATENT DEPT 704P FLOOR 8 T29  
1201 SOUTH SECOND STREET  
MILWAUKEE, WI 53204

EXAMINER

BOYCE, ANDRE D

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7 UNITED STATES PATENT AND TRADEMARK OFFICE  
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10 BEFORE THE BOARD OF PATENT APPEALS  
11 AND INTERFERENCES  
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14 *Ex parte* THOMAS M. KEELEY  
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17 Appeal 2008-3786  
18 Application 09/407,664  
19 Technology Center 3600  
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22 Decided: December 22, 2008  
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25 Before HUBERT C. LORIN, ANTON W. FETTING, and DAVID B. WALKER,  
26 *Administrative Patent Judges*.  
27 FETTING, *Administrative Patent Judge*.

28 DECISION ON APPEAL

29 STATEMENT OF THE CASE

30 Thomas M. Keeley (Appellant) seeks review under 35 U.S.C. § 134 of a final  
31 rejection of claims 40-47, 49-56, 58-64, 69-74, and 76-79, the only claims pending  
32 in the application on appeal.

We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b) (2002).

We AFFIRM.

The Appellant invented a system and method for collecting intelligence data in order to determine a customer's equipment maintenance or replacement needs (Specification: page 1, lines 5-10).

An understanding of the invention can be derived from a reading of exemplary claims 40, 50, and 60, which are reproduced below [bracketed matter and some paragraphing added].

40. A factory automation system for providing status information on at least one factory automation component, comprising:

[1] a factory automation component distributed by a first party;  
[2] the component residing at a site location of a second party; and  
[3] the component communicating status information directly to the first party wherein the first party compiles the status information from the component and utilizes the status information to the benefit of the second party, the status information comprises component source information, first party site address information, component type information, second party site information and component health information;

[4] wherein the server site of the first party communicates version upgrade information to the component in response to version information from the component that does not correspond to a latest version.

50. An Internet business communication system, including:

[1] a website employed by a vendor for receiving factory automation component status information over the Internet directly from a plurality of factory components residing at one or more

customer sites, each component having a different IP address, the website matching component information residing at the vendor's website with the IP address of the component and providing this information to the vendor, the status information comprises component type information, component health information, customer name information, customer site information and component location information;

[2] wherein the status information further includes the component version information, such that the website communicates version upgrade information to at least one of the plurality of components in response to outdated component version information.

60. The method of claim 59, wherein the status information includes an IP address associated with the component and the step of searching includes matching the customer identification information and component location information corresponding to the IP address included in the status information.

This appeal arises from the Examiner's final Rejection, mailed October 7, 2005. The Appellant filed an Appeal Brief in support of the appeal on May 21, 2007. An Examiner's Answer to the Appeal Brief was mailed on September 6, 2007. A Reply Brief was filed on November 6, 2007.

#### PRIOR ART

The Examiner relies upon the following prior art:

Shigematsu et al.	US 5,432,715	July 11, 1995
Martinez et al.	US 5,956,665	Sep. 21, 1999
Ogushi et al.	US 6,385,497 B1	May 7, 2002
Sekizawa	US 6,430,711 B1	Aug. 6, 2002

REJECTIONS

Claims 40-47, 49, 59, 61-64, 69-74, 76, and 78-79 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, and Martinez.

Claims 50-56 and 58 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, Sekizawa, and Martinez.

Claims 60 and 77 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, Martinez, and Sekizawa.

ISSUES

The issues pertinent to this appeal are:

- Whether the Appellant have sustained their burden of showing that the Examiner erred in rejecting claims 40-47, 49, 59, 61-64, 69-74, 76, and 78-79 under 35 U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, and Martinez.
- Whether the Appellant have sustained their burden of showing that the Examiner erred in rejecting claims 50-56 and 58 under 35 U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, Sekizawa, and Martinez.
- Whether the Appellant have sustained their burden of showing that the Examiner erred in rejecting claims 60 and 77 under 35 U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, Martinez, and Sekizawa.

The pertinent issue turns on whether Ogushi, Shigematsu, and Martinez describe communicating upgrade information to the component in response to version information from the component that does not correspond to a latest

version and whether one of ordinary skill in the art would have been motivated to combine Ogushi, Shigematsu, and Martinez at the time of the invention.

### FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are believed to be supported by a preponderance of the evidence.

#### *Shigematsu*

01. Shigemitsu is directed towards a system and method for monitoring computers (col. 1, ll. 60-63).

02. Shigemitsu describes the transmitting/receiving of status messages to include the address of the monitoring computer, the port of the collecting unit, and the address of the monitored computer (col. 9, ll. 53-61).

#### *Martinez*

03. Martinez is directed to a system and method of automatically determining operational status of components of a computer system (col. 1, ll. 29-31).

04. Martinez describes the detection of the version number for components and the monitoring of any changes to the configuration of the components (col. 2, ll. 58-65).

#### *Ogushi*

05. Ogushi is directed to a system for maintaining equipment at a remote location (col. 1, ll. 5-6).

06. Ogushi describes a system using a web interface where a host computer at a factory transmits operating status information of industrial

equipment at the factory to the vendor of the equipment (col. 3, ll. 15-29, col. 5, ll. 64-67, and figure 5).

07. Ogushi describes the equipment and the factory in a remote location from the vendor that receives the status information (figure 1 and col. 3, ll. 15-29).

08. The transmitted status information includes an address/URL of the host systems, the serial number of the equipment, model of the equipment, date and time information, an error code, emergency degree, countermeasures, trouble state, and progress (col. 4, ll. 14-21 and col. 5, ll. 55-63).

09. The status information is transmitted from the equipment to the host computer. The information is then transmitted to the vendor in order for the vendor to provide maintenance support for the equipment. The host computer of the vendor searches through a trouble database to find solutions and countermeasures to the trouble state (figure 2, col. 3, ll. 55-67, and col. 4, ll. 37-56).

10. The host computer automatically maintains the equipment by software updating (col. 3, ll. 64-67).

11. The vendor can retrieve a new version of the software to be used for maintenance (col. 6, ll. 1-3).

*Sekizawa*

12. Sekizawa is directed to a machine monitoring system for monitoring the state of plurality of connected machines (col. 1, ll. 8-9).

13. Sekizawa describes the preparation of an email that includes status information, such as the operational state, of each network printer (col. 19, ll. 16-26).

14. The status information includes the IP address to each of the networked printers (col. 19, ll. 26-30 and col. 21, ll. 22-24).

### *Facts Related To The Level Of Skill In The Art*

15. Neither the Examiner nor the Appellant has addressed the level of ordinary skill in the pertinent arts of automated maintenance systems. We will therefore consider the cited prior art as representative of the level of ordinary skill in the art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (“[T]he absence of specific findings on the level of skill in the art does not give rise to reversible error ‘where the prior art itself reflects an appropriate level and a need for testimony is not shown’”) (quoting *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163 (Fed. Cir. 1985).

### *Facts Related To Secondary Considerations*

16. There is no evidence on record of secondary considerations of non-obviousness for our consideration.

## PRINCIPLES OF LAW

### Obviousness

A claimed invention is unpatentable if the differences between it and the prior art are “such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” 35



1 U.S.C. § 103(a) (2000); *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1729-30  
2 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14 (1966).

3 In *Graham*, the Court held that that the obviousness analysis is bottomed on  
4 several basic factual inquiries: “[1] the scope and content of the prior art are to be  
5 determined; [(2)] differences between the prior art and the claims at issue are to be  
6 ascertained; and [(3)] the level of ordinary skill in the pertinent art resolved.” 383  
7 U.S. at 17. *See also KSR*, 127 S.Ct. at 1734. “The combination of familiar  
8 elements according to known methods is likely to be obvious when it does no more  
9 than yield predictable results.” *Id.*, at 1739.

10 “When a work is available in one field of endeavor, design incentives and  
11 other market forces can prompt variations of it, either in the same field or a  
12 different one. If a person of ordinary skill can implement a predictable variation, §  
13 103 likely bars its patentability.” *Id.* at 1740.

14 “For the same reason, if a technique has been used to improve one device,  
15 and a person of ordinary skill in the art would recognize that it would improve  
16 similar devices in the same way, using the technique is obvious unless its actual  
17 application is beyond his or her skill.” *Id.*

18 “Under the correct analysis, any need or problem known in the field of  
19 endeavor at the time of invention and addressed by the patent can provide a reason  
20 for combining the elements in the manner claimed.” *Id.* at 1742.

21 *Automation of a Known Process*

22 It is generally obvious to automate a known manual procedure or mechanical  
23 device. Our reviewing court stated in *Leapfrog Enterprises Inc. v. Fisher-Price*  
24 *Inc.*, 485 F.3d 1157 (Fed. Cir. 2007) that one of ordinary skill in the art would have  
25 found it obvious to combine an old electromechanical device with electronic

1 circuitry “to update it using modern electronic components in order to gain the  
2 commonly understood benefits of such adaptation, such as decreased size,  
3 increased reliability, simplified operation, and reduced cost. . . . The combination  
4 is thus the adaptation of an old idea or invention . . . using newer technology that is  
5 commonly available and understood in the art.” *Id* at 1163.

6 ANALYSIS

7 *Claims 40-47, 49, 59, 61-64, 69-74, 76, and 78-79 stand rejected under 35*  
8 *U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, and Martinez*

9 The Appellant argues these claims as a group.

10 Accordingly, we select claim 40 as representative of the group.  
11 37 C.F.R. § 41.37(c)(1)(vii) (2007).

12 The Examiner found that Ogushi taught all of the limitations of claim 40  
13 except “component source information” and “version information from the  
14 component that does not correspond to a latest version” (Answer 4-5). The  
15 Examiner found that these limitations were taught by Shigematsu and Martinez  
16 respectively (Answer 4-5). The Examiner concluded that it would have been  
17 obvious to combine Ogushi, Shigematsu, and Martinez in order to create a more  
18 robust system (Answer 5).

19 The Appellant contends that 1) none of the references disclose “wherein the  
20 server site of the first party communicates version upgrade information to the  
21 component in response to version information from the component that does not  
22 correspond to a latest version” (App. Br. 8, first paragraph), specifically that the  
23 information is not communicated *to the component* in response to version  
24 information from the component that does not correspond to a latest version (App.

Br. 8, last paragraph) and 2) there is no motivation to combine the references (App. Br. 9, last paragraph) because a) the Examiner failed to cite where in the reference there is a motivation to combine the references (App. Br. 9, last paragraph) and b) the references are non-analogous (App. Br. 10, second paragraph) and the Examiner has used impermissible hindsight in combining the references (App. Br. 11, second paragraph).

We disagree with the Appellant. First, only limitation [4] is being contested and all other limitations are described by Ogushi, Shigematsu, and Martinez (FF 02, FF 04, FF 06, FF 07, FF 08, FF 09, and FF 11).

The Appellant first contends that Ogushi fails to describe limitation [4] (App. Br. 8, last paragraph). The Appellant specifically argues that Ogushi is only concerned with archiving information associated with an item, rather than communicating upgrade information to the component in response to version information from the component (App. Br. 8, last paragraph).

We disagree with the Appellant. Ogushi describes a system where a host computer receives status and trouble information from industrial components (FF 08 and FF 09). Thus, the information is received from the component. This information is then transmitted to the vendor of the components (FF 09). The vendor then searches a trouble database to find a solution or countermeasure to the trouble state (FF 09) and automatically updates software to the component as necessary (FF 10). A step of automatically updating software implicitly includes performing a check to see whether the software is the most current. As such, this step is functionally encompassing of communicating upgrade information to the component.

1        Additionally, the vendor can retrieve a new version of the software for  
2        maintenance (FF 11), which would imply checking for lack of correspondence  
3        with the most current version before retrieving that version. It is generally obvious  
4        to automate a known manual procedure or mechanical device. *Leapfrog*, 485 F.3d  
5        at 1163.

6        The Appellant further contends that Shigematsu and Martinez fail to teach this  
7        limitation (Br. Page 8, last paragraph and Br. Page 9, first paragraph). Appellant's  
8        contention that Shigematsu and Martinez fail to teach this limitation does not  
9        persuade us of error on the part of the Examiner, because the Appellant responds to  
10       the rejection by attacking the references separately, even though the rejection is  
11       based on the combined teachings of the references. Nonobviousness cannot be  
12       established by attacking the references individually when the rejection is  
13       predicated upon a combination of prior art disclosures. *See In re Merck & Co.*  
14       *Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). The Examiner found that Shigematsu  
15       describes "component source information" and Martinez specifically describes the  
16       use of version numbers. The Examiner found that Ogushi taught the remaining  
17       limitations (Answer 4-5).

18       The Appellant additionally contends that there is no motivation to combine  
19       Ogushi, Shigematsu, and Martinez because the Examiner failed to cite some  
20       teaching or suggestion in the references to support the combination (App. Br. 9,  
21       second paragraph). We agree with the Examiner. As discussed in *KSR*, 127 S.Ct.  
22       at 1742, a specific teaching or suggestion to support the combination of the  
23       references need not be found in the references. We find that the benefit of making  
24       the system more robust by determining the most updated information would have  
25       been apparent to one of ordinary skill in the art at the time of the invention.

1 The Appellant further contends that the references are non-analogous (App. Br.  
2 10, second paragraph and third paragraph) and the Examiner used impermissible  
3 hindsight in combining the references (App. Br. 11, second paragraph). We  
4 disagree with the Appellant. Ogushi, Shigematsu, and Martinez are all concerned  
5 with monitoring equipment (FF 01, FF 05, and FF 07). As such, Ogushi,  
6 Shigematsu, and Martinez are analogous references. Furthermore, it would have  
7 been apparent to one of ordinary skill in the art to combine Ogushi, Shigematsu,  
8 and Martinez at the time of the invention (as discussed above). Thus, the  
9 Examiner did not use impermissible hindsight analysis of the references. We find  
10 that the Examiner did not err in combining Ogushi, Shigematsu, and Martinez in  
11 rejecting claim 40.

12 The Appellant has not sustained his burden of showing that the Examiner erred  
13 in rejecting claims 40-47, 49, 59, 61-64, 69-74, 76, and 78-79 under 35 U.S.C. §  
14 103(a) as unpatentable over Ogushi, Shigematsu, and Martinez for the above  
15 reasons.

16 *Claims 50-56 and 58 stand rejected under 35 U.S.C. § 103(a) as unpatentable*  
17 *over Ogushi, Shigematsu, Sekizawa, and Martinez*

18 The Appellant argues these claims as a group. Accordingly, we select claim  
19 50 as representative of the group.

20 The Examiner found that Ogushi teaches all of the limitations of claim 50,  
21 except “name information and component information”, “each component having a  
22 different IP address, the website matching component information residing at the  
23 vendor’s website with the IP address of the component”, and “the status  
24 information further includes version information from the component” (Answer  
25 19). The Examiner found that Shigematsu, Sekizawa, and Martinez teach these

1 features, respectively (Answer 19). The Examiner concluded that it would have  
2 been obvious to combine Ogushi, Shigematsu, Sekizawa, and Martinez in order to  
3 create a more robust system (Answer 20).

4 The Appellant contends that Sekizawa fails to disclose “a website that  
5 communicates upgrade information to a component that is running an outdated  
6 version” (App. Br. 12, second paragraph). We disagree with the Appellants. The  
7 Examiner found that Ogushi described this limitation (Answer 18-19, last  
8 paragraph-first paragraph). As discussed above, nonobviousness cannot be  
9 established by attacking the references individually when the rejection is  
10 predicated upon a combination of prior art disclosures. *See In re Merck*, 800 F.2d  
11 at 1097.

12 The Appellant further reiterates the lack of motivation to combine the  
13 references and the impermissible hindsight arguments *supra* (App. Br. 12, second  
14 paragraph). We disagree with the Appellant. Sekizawa is concerned with  
15 monitoring the state of equipment (FF 12) and therefore provides implementation  
16 details pertinent to practicing Ogushi, Shigematsu, and Martinez (FF 01, FF 05,  
17 and FF 07). Thus, it would have been apparent to one of ordinary skill in the art at  
18 the time of the invention to combine the references, and the Examiner did not use  
19 impermissible hindsight analysis of the references.

20 Therefore, the Appellant has not sustained his burden of showing that the  
21 Examiner erred in rejecting claims 50-56 and 58 under 35 U.S.C. § 103(a) as  
22 unpatentable over Ogushi, Shigematsu, Sekizawa, and Martinez.

23 *Claims 60 and 77 stand rejected under 35 U.S.C. § 103(a) as unpatentable*  
24 *over Ogushi, Shigematsu, Martinez, and Sekizawa*

1       The Appellant argues these claims as a group. Accordingly, we select claim 60  
2 as representative of the group.

3       The Examiner found that Ogushi, Shigematsu, and Martinez teach all of the  
4 limitations of independent claim 59 (as discussed above for claim 40) (Answer 23),  
5 except for the feature of “the status information includes an IP address associated  
6 with the component and the step of searching includes matching the customer  
7 identification information and component location information corresponding to  
8 the IP address included in the status information” (Answer 23). The Examiner  
9 found that Sekizawa teaches this feature (Answer 23). The Examiner oncluded  
10 that it would have been obvious to combine this feature taught by Sekizawa to  
11 Ogushi, Shigematsu, and Martinez to increase efficiency (Answer 23). Claims 60  
12 and 77 depend from claims 59 and 74 respectively.

13       The Appellant contends Sekizawa fails to describe the deficiencies argued for  
14 claim 40 above. As discussed above, we find that Ogushi, Shigematsu, and  
15 Martinez describe claims 59 and 74, and thus Appellant’s contention that Sekizawa  
16 fails to cure any deficiencies is not persuasive.

17       The Appellant further contends that one of ordinary skill in the art would not  
18 have been motivated to combine Ogushi, Shigematsu, Martinez, and Sekizawa.  
19 This argument was found to be insufficient to overcome their burden of showing  
20 that the Examiner erred in rejecting claims 50-56 and 58 *supra* and is not found to  
21 be persuasive here for the same reasons.

22       Therefore the Appellant has not sustained his burden of showing that the  
23 Examiner erred in rejecting claims 60 and 77 under 35 U.S.C. § 103(a) as  
24 unpatentable over Ogushi, Shigematsu, Sekizawa, and Martinez.

CONCLUSIONS OF LAW

The Appellant has not sustained its burden of showing that the Examiner erred in rejecting claims 40-47, 49-56, 58-64, 69-74, 76-79 under 35 U.S.C. § 103(a) as unpatentable over the prior art.

DECISION

To summarize, our decision is as follows:

- The rejection of claims 40-47, 49, 59, 61-64, 69-74, 76, and 78-79 under 35 U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, and Martinez is sustained.
- The rejection of claims 50-56 and 58 under 35 U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, Sekizawa, and Martinez is sustained.
- The rejection of claims 60 and 77 under 35 U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, Martinez, and Sekizawa is sustained.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(2007).

AFFIRMED



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3

4 JOHN J. HORN  
5 ALLEN BRADLEY COMPANY  
6 PATENT DEPT 704P FLOOR 8 T29  
7 1201 SOUTH SECOND STREET  
8 MILWAUKEE, WI 53204

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